



407 Parkside Drive, Waterdown, Ontario L0R 2H0
 Tel: (905) 689-6661 Toll Free: (888) 689-6661 Fax: (905) 689-0485
 www.optaminerals.com

TECHNICAL DATA SHEET

GARNET 80X is a pure, natural product that consists of a group of minerals with the mineral, Garnet, as its major component. The material mined from a Garnet deposit in Keeseville, NY and consists of extremely sharp grains. It is a hard, iron free abrasive that contains less than 1% free crystalline silica. These natural properties provide a unique material for filtration and abrasive blasting or waterjet cutting applications.

Typical Chemical Analysis (%):

- Silicon Dioxide SiO₂ 36.0
- Iron Oxide Fe₂O₃ 31.1
- Calcium Oxide CaO 26.0
- Aluminum Oxide Al₂O₃ 2.9
- Magnesium Oxide MgO 1.0
- Titanium Oxide TiO₂ 1.0
- Zirconium Dioxide ZrO₂ 1.0

Typical Physical Properties:

Colour Light to dark brown	Grain Shape Blocky, angular
Bulk Density 136 lbs./ft. ³	Moh Hardness > 7
Specific Gravity ~ 4.0	Melting Point ~1300°C
Moisture < 0.20%	Solubility Insoluble

TYPICAL Gradation:

Typical Analysis	80X
US Sieve #	% Retained
30	
40	.3
50	21.6
60	29.0
70	30.4
80	14.8
100	2.9
140	1.0
200	0.0
PAN	

Testimonial from Carpenter Brothers Inc

A trial comparison of the IG 80x material and a hard garnet from China.
"My customer loved the result. They were cutting a 2" pc. of steel and felt the surface finish was a good as the IOGS Garnet (IOGS produces the natural Almandine Garnet) he was buying before the shutdown".

DISCLAIMER:

The information contained in this technical data sheet is representative of the typical analysis of the product, but may vary due to sampling and or sample segregation.

Opta Minerals Inc. assumes no liability arising out of the use of this product by others.